

# **Qwest Foundation for Education Competitive Sub-grant Application Assurance Sheet**

Project Title: Total Curriculum Immersion with Podcasting Amount of Request: \$9,982.40

District Name: Independent Schools District of Boise City Number: 208-854-4000

Name of Certificated Teacher: Richard Whittaker

Name of School currently teaching at: Collister Elementary

Years taught in Idaho K-12 public education: 35 Years

Content area(s) that you are teaching in Idaho K-12 public education: All Content Areas

**I certify that if I receive a Qwest Foundation for Education Grant –**

- **I agree to be videotaped teaching a technology-based lesson for purposes of sharing best practices with other Idaho K-12 teachers.**
- **I agree to do one presentation on technology integration to other Idaho K-12 teachers before October 31, 2008.**

Superintendent Name Dr. Stan Olson	E-mail Stan.olson@boiseschools.org
Signature Dr. Stan Olson	
Principal Name Dr. Christina Olson	E-mail Christina.olson@boiseschools.org
Signature Dr. Christina Olson	
Teacher Richard Whittaker	E-mail Dick.whittaker@boiseschools.org
Signature Richard Whittaker	

## **Current Use of Technology in My Classroom**

Richard Whittaker, 6<sup>th</sup> Grade Teacher  
Collister Elementary

I have been teaching 6<sup>th</sup> grade my entire career and because of advances in technology I know that in order to give my students the tools they will need to thrive in the future, I must use technology to increase the power and effectiveness of my lessons. I have learned that you can teach old dogs new tricks. I purchased my own Smartboard and projector to use in my classroom and took training on how to use it effectively. My PowerPoint presentations, including Jeopardy and other games, all suddenly became interactive on the Smartboard. I found that the only drawback to using a Smartboard was that when either a student or I were working at the board, it was difficult for the rest of us to see the action. We now use two wireless slates in the classroom so that everyone can see the action as it takes place. This has proven to be especially important when teaching math concepts. If a student is working a problem on the slate, I can identify any errors immediately from my slate and correct the problem. This prevents students from incorrectly learning a math process and allows everyone to see the proper order of operations.

I use microscopes with a microscope digital camera to teach life science, earth science, and chemistry. The digital camera allows us to take time-lapse photography so students see the progression of changes in the subject they are viewing.

We also use the JASON Project Operation: Monster Storms (<http://www.jason.org>) and Immersion Presents (<http://www.immersionpresents.org/>). The JASON Project's Operation: Monster Storms curriculum aligns with National Science Education Standards (NSES) for grades 5-8 and allows my students to join with leading weather scientists as they explore wild weather. Immersion Presents (for grades 5 –8) places a joint emphasis on scientific knowledge coupled with the fun and excitement of exploring places and marine animal behavior very few humans know about. Students learn about the seafloors of the world's oceans and about the vitally important microbes that thrive on the poisonous chemicals emitted at hydrothermal vents. These programs give my students real-time science exposure and the opportunity to think about effective solutions to real-life problems we face today.

For language and reading I use Read Naturally, a program that provides a method for increasing fluency, and Accelerated Reader a program that allows students to read a book and take a computerized test that quantifies their vocabulary and comprehension. I am also using PLATO (<http://www.plato.com/>). PLATO is a teacher-facilitated technology tool that provides self-paced solutions for independent practice and effective intervention solutions for my students.

I use Discovery Streaming (<http://streaming.discoveryeducation.com/index.cfm>) which provides me with a collection of over 40,000 video segments that are aligned to our State curriculum and cover all core subjects. My students are using Windows Movie Maker and Audacity to make their own movies. They know how to download video segments from Discovery Streaming. In Windows Movie Maker they have learned how to delete the sound from the video, splice the video, and add special effects, title and credit pages, and transitions. Using microphones, they record their own narration to the video that must contain all pertinent facts and be timed to fit the video perfectly. They use Audacity to add other audio tracks, including music. The finished movies are shared with the rest of the class and are graded for accuracy and content. They are learning a great deal, working diligently on assignments, but they don't perceive this learning process as schoolwork.

## **How Using Technology in My Classroom Has Impacted Student Performance**

Last year I had one of those years that every teacher dreads. I began to question my abilities and wonder if I would be able to reach my students. Several of the students in the classroom were not the least bit interested in learning, or in what I was teaching. They came in to my classroom determined to find it boring and to disengage. Many had the abilities, but lacked the desire. They came to me with low Idaho State Achievement Tests scores, and from the very first day of class, I was questioning how I would instill in them not only the love of learning, but also the determination to achieve. Needless to say it was a constant struggle and I would not find out until after school was released and spring ISAT scores were made available, if I had been able to reach and to teach them. At one point during the year, I had parents sit in during class because they were concerned about their children's grades. At the end of the day these parents were asking their children what was wrong with them. The message they gave their children was that the class was exciting, engaging, and fun and that they would like to be able to attend class everyday. When the spring ISAT results were posted, we had met our adequate yearly progress, and all students showed improvement in Reading, Math and Language. Twelve of the students qualified for advanced placement in junior high and one student was even able to qualify for the Math and Science Center. If all of these students had been actively involved in the learning process from the beginning, the numbers would have been higher. One of the things I realized after it was all over was that I had held them accountable and that through the use of technology in my classroom they were exposed to the material whether they wanted to be engaged or not. There was no escape from absorbing information from the lessons. Without the technology that I have been using in the classroom, they would have been able to tune out completely. The interactive whiteboard and Discovery Streaming made them active, although reluctant participants.

This year my students are much more self-motivated, but I am still impressed by the impact that the technology I am using has on them. We just finished studying microorganisms. The students selected the specimens that they wanted to create movies about and had to write out their own narrations to include the facts about their specimens, to coincide with what was happening in the video and to have the narration timed to fit the video. I was amazed, when students were viewing real specimens through the microscopes, that they could readily give the scientific names of the specimens. They aren't likely to forget either because they were so actively involved in the learning process. They also have the movies they made to review whenever they want.

Both Read Naturally and Accelerated Reader are used throughout our school. I believe these two programs are having a direct impact on my students' reading scores. After using these two programs extensively for the last three years, 90 percent or more of my students have continually scored proficient in both their ISAT Reading and CBM scores. CBM is a Curriculum Based Measurements test that measures fluency.

I helped write grants to purchase Smartboards for other classrooms in our building and have taught several classes on how to use Windows Movie Maker and Audacity with Discovery Streaming to fellow teachers. I believe that Smartboards and the other technology that we use in our building had a direct impact on our school being able to make our Adequate Yearly Progress for the 2006 – 2007 school year. All of our classrooms now have Smartboards and all of our staff members have taken a Smartboard class.

### **Total Curriculum Immersion with Podcasting**

(How I will use the proposed purchases to use technology in an innovative manner to enhance learning opportunities for students)

Many of my students have inadequate or no computers at home and almost none have high speed Internet. Through the use of Discovery Streaming in my classroom, I have been able to make their understanding of any subject so much more complete and concrete by enhancing their learning with video segments. Unfortunately students have been unable to access and to complete assignments that I have created for them in Discovery Streaming from home because of their computer limitations.

By purchasing a classroom set of video iPods, I will be able to download Discovery Streaming videos, documents, and quizzes onto the iPods. I will download videos about the subjects we are studying and students will be able to watch them on the iPods. They will be required to study the video, and then prepare their narration for the video. Their videos will be made on the Lenovo ThinkPad that I am requesting to purchase. Students will learn to use Adobe Premiere Elements, video-editing software that will come pre-loaded on the Lenovo laptop. Movies made with Adobe Premiere will be formatted to fit the iPods. They will be using many of the same techniques that we are using with Windows Movie Maker and Audacity, but with more options available to them. Many of my students are involved in either Orchestra or Band and will be able to make their own music by recording themselves playing their instruments with the Belkin Tune Talk Stereos. Once downloaded into Adobe Premiere Elements, they will be able to edit their music. Their video narrations will also be recorded using the Belkin Tune Talks. We will broadcast student made podcasts through Podomatic (<http://www.podomatic.com/>), which will provide us a venue to share our work worldwide. Podomatic is a free service that will provide us a customizable podcast page, detailed audience statistics, and video, audio and photo sharing. Grandparents, parents, aunts, uncles and cousins will all be able to view our podcasts, no matter where they live. The Lenovo ThinkPad computer, combined with the Bretford PowerSync Cart will enable me to charge and download (sync) all iPods simultaneously, which will be a huge timesaver.

I will dictate notes for students to listen to for study and review. I will record test questions on the iPods for students to take tests at their own pace. This will be especially useful for students that have difficulty reading. They will no longer have to have someone read a test to them; they will be able to listen to the questions from their desks on the iPod. If a student needs to have the question repeated, they can simply replay it on the iPod. This eliminates other students from having to listen to a question over and over. By purchasing the software Camtasia Studio/SnagIt bundle from TechSmith Corporation; I will be able to record everything that happens at the Smartboard or my computer screen. When we play Jeopardy or any of the other PowerPoint game presentations that I have created for my classroom, I will be able to record the actions in real-time and download those to the iPods for my students to be able to use as study aids when preparing for a test. This program will allow me to download all of my other PowerPoint presentations to the iPods as well. If a student is absent, they will be able to see and hear what was taught during the classes they missed. The Camtasia software allows me to hook up a microphone and record as I am instructing from the Smartboard. If something is important enough to say to the class, it is important enough for the class to hear again.

## **Innovative Use in the Classroom of Proposed Purchases**

I will use iPods to enhance my instruction, engage students and translate classic subjects into the digital age. A podcast's content can be anything conveyed by an audio or video file: a recorded lecture, a demonstration of biology principles, daily assignments. Podcasting will help parents be more informed about what their children are studying.

Students will write a radio drama based on actual historical events that occurred in the shaping of the Americas. They will study how events that happened in North America, Central America, and South America influenced the United States, as we know it today. They will explain U.S. relationships between our two closest neighbors, Canada and Mexico, using historical and current events. They will conduct live interviews and include commercials in their broadcast. New episodes will be written and produced as the class continues its studies of Canada, Central and South America. We will use the Belkin Tune Talk Stereos to record narration directly onto the iPods. Our radio dramas will be aired on Podomatic to receive feedback and to share with teachers, other students, parents, and the world. Students will follow a rubric that I have developed when preparing a podcast.

Students will create podcasts with factual information about the units we are studying in science. In some instances they will be able to incorporate video footage and digital stills captured from the microscope camera that we are currently using in our classroom. Students sometimes find it difficult to conduct science experiments, especially if they are visual learners and have a difficult time with written or oral instructions. By using recordings of my instructions, student observations and a digital camera, students will be able to view the prepared instructions complete with photos on their iPods before the whole class actually conducts a lab. Students who are absent will be able to see what happened in class. Students will also use iPods to record observations and field investigations when we are on ecology field trips.

Students will use iPods and a voice recorder to record themselves reading stories. The content will be cleaned up using Adobe Premiere Elements and redistributed to the students who will use it to sound out words, hear how language is used fluidly, and gain a better understanding of the story.

- SnagIt software will be used to capture content from many different sources, including student work and teacher notes.
- Camtasia software will be used to record my lessons as they appear on the Smartboard, including PowerPoint presentations.
- Assignments will be downloaded to the iPods.
- A free software program called iQuizmaker will be used to develop quizzes for the iPods for students to take.
- With iPods, students will have a valuable study aid whenever and wherever they need it.
- Students will learn how to import photos into Adobe Premiere Elements on the Lenovo ThinkPad and use the Labtec Stereo headsets to add voice memos.

Reading is fundamental and I require one hour of reading a day. Students will write skits, puppet shows, and Readers Theatre scripts based on novels and picture books that they are reading. Performances will be videotaped. Students will edit the video using Adobe Premiere Elements on the Lenovo ThinkPad. DVDs will be created and placed in the school library for everyone to checkout. Audio podcast of these presentations, complete with sound effects and music will be aired on Podomatic.

**Qwest Foundation for Education Grant Expenditure Plan**  
**(Standard IFARMS Budget Format)**

Activity	100	200	300	400	500	<b>TOTAL</b>
	Salaries	Benefits	Contractual Agreements	Materials and Supplies	Capital Objects	
28 - iPod Video Nanos, 8 GB-Green (Classroom set of iPods)				\$5,572.00		\$5,572.00
1 - Bretford Power Sync Cart for iPods				\$2,299.00		\$2,299.00
1 – Lenovo ThinkPad T61/With Adobe Premiere Elements Pre- installed				\$1,228.00		\$1,228.00
4 - Belkin Tune Talk Stereo				\$239.80		\$239.80
1 - Apple iPod Camera Connector				\$26.00		\$26.00
29 – Labtec Stereo 342 Headsets				\$418.60		\$418.60
Camtasia Studio/SnagIt Software Bundle				\$199.00		\$199.00
<b>TOTAL</b>						<b>\$9,982.40</b>